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PATENT TRADEMARK OFFICE

Docket No: 4280/1M321US1

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Alan J. KORMAN *et al.*

Serial No.: 09/644,668

Art Unit: 1644

Confirmation No.: 5400

Filed: August 24, 2000

Examiner: Jessica H. ROARK

For: HUMAN CTLA-4 ANTIBODIES AND THEIR USES

TRANSMITTAL OF INFORMATION DISCLOSURE
STATEMENT REFERENCES (COURTESY COPY)

Hon. Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

S I R:

Pursuant to the request of Examiner Jessica H. Roark, Applicants submit herewith courtesy copies of references 1-40 that were originally submitted with Applicants' Information Disclosure Statement ("IDS") mailed on September 25, 2001 for this application. For the Examiner's convenience, Applicants also submit herewith:

(1) a copy of Form PTO/SB/08A (Substitute for Form 1449A/PTO), which was submitted as part of the IDS, attached hereto at Exhibit Tab A; and (2) a copy of the return receipt postcard.

Serial No. 09/644,668
Preliminary Amendment and Response to Restriction Requirement

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REMARKS

At the outset, Applicants thank Examiner Jessica A. Roark for the courtesies extended during the telephone call to Applicants' undersigned representative on June 2, 2003. During that telephone call, Examiner Roark stated that the references originally submitted with the Information Disclosure Statement (IDS) for this application had been lost by the Patent and Trademark Office (PTO). Examiner Roark indicated that it would help expedite prosecution of the application if Applicants provide courtesy copies of at least the non-patent references.

Pursuant to the Examiner's request and to facilitate the examination of this application, Applicants submit herewith copies the 82 reference documents that were cited in Applicants' IDS. For the Examiner's convenience, a copy of Form PTO/SB/08A (Substitute for Form 1449A/PTO), which was submitted as part of the IDS, is also submitted here at Exhibit Tab A. Applicants note that the references submitted here have been labeled with numbered Exhibit Tabs corresponding to the citations number for each reference on accompanying Form PTO/SB/08A.

Also submit herewith, at Exhibit Tab B, is a true copy of the return receipt postcard which, on information and belief, was submitted with the IDS on September 25, 2001. The postcard has been stamped by the PTO Receiving Office indicating that the documents listed therein (including 82 IDS references) were received by the PTO in their entirety on or about October 1, 2001.

Because this resubmission of those reference documents is due to a PTO error, no fee should be charged for this submission. Nevertheless, should the PTO determine

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that any fee is required for this submission or that any refund is due for this application. the Commissioner is hereby authorized and requested to charge any required fee(s) and/or credit any refund(s) due to our Deposit Account No. 04-0100.

The Examiner is invited to contact Applicants' undersigned representative again if there is any problem with the receipt of these references or if she believes that it may advance prosecution of this application. An early and favorable examination of this application on the merits is earnestly sought.

Respectfully submitted,

Dated: June 3, 2003

Samuel S. Woodley
Samuel S. Woodley, Ph.D.
(Reg. No. 43,287)
Agent for Applicants

DARBY & DARBY, P.C.
805 Third Avenue
New York, N.Y. 10022
Phone (212) 527-7700

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet 1 of 5

Complete if Known

Application Number	09/644,668
Filing Date	August 24, 2000
First Named Inventor	Korman, Alan J.
Group Art Unit	1632
Examiner Name	Unassigned
Attorney Docket Number	014643-010510US

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U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
	1	6,162,963		Kucherlapati et al.	12-19-2000	
	2	6,150,584		Kucherlapati et al.	11-21-2000	
	3	6,114,598		Kucherlapati et al.	09-05-2000	
	4	6,075,181		Kucherlapati et al.	06-13-2000	
	5	6,051,227		Allison et al.	04-18-2000	
	6	5,977,318		Linsley et al.	11-02-1999	
	7	5,968,510		Linsley et al.	10-19-1999	
	8	5,939,598		Kucherlapati et al.	11-17-1999	
	9	5,885,796		Lonberg et al.	03-23-1999	
	10	5,877,397		Lonberg et al.	03-02-1999	
	11	5,874,299		Lonberg et al.	02-23-1999	
	12	5,855,887		Allison et al.	01-05-1999	
	13	5,844,095		Linsley et al.	12-01-1998	
	14	5,814,318		Lonberg et al.	09-29-1998	
	15	5,811,097		Allison et al.	09-22-1998	
	16	5,789,650		Lonberg et al.	08-04-1998	
	17	5,770,429		Lonberg et al.	06-23-1998	
	18	5,770,197		Linsley et al.	06-23-1998	
	19	5,661,016		Lonberg et al.	08-26-1997	
	20	5,633,425		Lonberg et al.	05-27-1997	
	21	5,625,126		Lonberg et al.	04-29-1997	
	22	5,569,825		Lonberg et al.	10-29-1996	
	23	5,545,806		Lonberg et al.	08-13-1996	

FOREIGN PATENT DOCUMENTS

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		Office ³	Number ⁴	Kind Code ⁵ (if known)				
	24	PCT	WO00/37504		Hanson et al.	06-29-2000		
	25	PCT	WO00/10383		Tomizuka et al.	03-02-2000		abstract only
	26	PCT	WO98/42752		Kuchroo et al.	10-01-1998		

Examiner Signature

Date Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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Sheet 2 of 5

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Attorney Docket Number	014643-010510US

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		Office ³	Number ⁴	Kind Code ⁵ (if known)				
	27	PCT	WO98/37757		Tomizuka et al.	09-03-1998		abstract only
	28	PCT	WO98/24893	A2	Jakobovits et al.	06-11-1998		
	29	PCT	WO98/24893	A3	Jakobovits et al.	06-11-1998		
	30	PCT	WO98/24884		Lonberg et al.	06-11-1998		
	31	PCT	WO97/07671		Tomizuka et al.	03-06-1997		abstract only
	32	PCT	WO96/34096		Kucheralapati et al.	10-31-1996		
	33	PCT	WO96/33735		Kucheralapati et al.	10-31-1996		
	34	PCT	WO95/33770		Gribben et al.	12-14-1995		
	35	PCT	WO94/25585		Lonberg et al.	11-10-1994		
	36	PCT	WO94/02602		Kucheralapati et al.	02-03-1994		
	37	PCT	WO93/12227		Lonberg et al.	06-24-1993		
	38	PCT	WO92/22645		Huang et al.	12-23-1992		
	39	PCT	WO92/03918		Lonberg et al.	03-19-1992		
	40	PCT	WO91/10741		Kucheralapati et al.	07-25-91		

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Application Number

09/644,668

Filing Date

August 24, 2000

First Named Inventor

Korman, Alan J.

Group Art Unit

1632

Examiner Name

Unassigned

Attorney Docket Number

0146432-010510US

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	41	BLAIR et al. "Cutting edge: CTLA-4 ligation delivers a unique signal to resting human CD4 T cells that inhibits interleukin-2 secretion but allows Bcl-X _L induction," The J. of Immunology 22:1767 (1998)	
	42	BLUESTONE (1997) J. Immunol. 158:1989-1993	
	43	BRUNET et al., Immunol. Rev. 103:21-36 (1988)	
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	51	FISHWILD et al. "High-avidity human IgGk monoclonal antibodies from a novel strain of minilocus mice," Nature Biotechnology 14:845-851 (1996)	
	52	FREEDMAN (1987) J. Immunol. 138:3260-3267	
	53	FREEMAN (1989) J. Immunol. 143:2714-2722	
	54	GRIBBEN et al. "CTLA4 mediates antigen-specific apoptosis of human T cells," Proc. Natl. Acad. Sci. USA 92:811-815 (1995)	
	55	HURWITZ et al. "CTLA-4 blockade synergizes with tumor-derived granulocyte-macrophage colony-stimulating factor for treatment of an experimental mammary carcinoma," Proc. Natl. Acad. Sci. USA 95:10067-10071 (1998)	

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First Named Inventor	Korman, Alan J.
Group Art Unit	1632
Examiner Name	Unassigned
Attorney Docket Number	0146432-010510US

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

56	HURWITZ et al. "Immunotherapy of primary prostate cancer in a transgenic model using a combination of CTLA-4 blockade and tumor cell vaccine," Cancer Research 60:2444-2448 (2000)
57	KEARNEY (1995) J. Immunol. 155:1032-1036
58	KOHNO et al., Cell. Immunol. 131:1-10 (1990)
59	KRUMMEL et al. "CD28 and CTLA-4 have opposing effects on the response of T cells to stimulation," (1995) J. Exp. Med. 182:459-465
60	KRUMMEL et al. "CTLA-4 engagement inhibits IL-2 accumulation and cell cycle progression upon activation of resting T cells," J. Exp. Med. 183:2533-2540 (1996)
61	KRUMMEL et al. "Superantigen responses and co-stimulation: CD28 and CTLA-4 have opposing effects on T cell expansion in vitro and in vivo," (1996) Int'l Immunol. 8:519-523
62	KWON et al. "Manipulation of T cell costimulatory and inhibitory signals for immunotherapy of prostate cancer," proc. Natl. Acad. Sci. USA 94:8099-8103 (1997)
63	Lafage-Pochitaloff et al., Immunogenetics 31:198-201 (1990)
64	LEACH et al. "Enhancement of antitumor immunity by CTLA-4 blockade," Science. 271:1734-1736 (1996)
65	LESSLAUER et al., Eur. J. Immunol. 16:1289-1296 (1986)
66	LINDSTEN et al., Science 244:339-343 (1989)
67	LINSLEY et al. "Coexpression and functional cooperation of CTLA-4 and CD28 on activated T lymphocytes," J Exp. Med. 176:1595-1604 (1992)
68	LINSLEY et al. "CTLA-4 is a second receptor for the B cell activation antigen B7," J. Exp. Med. 174:561-569 (1991)
69	LINSLEY et al., J. Exp. Med. 173:721-730 (1991)
70	LINSLEY et al., Proc. Natl. Acad. Sci. USA 87:5031-5035 (1990)
71	LONBERG et al. "Human antibodies from transgenic mice," International Review of Immunology 13:65-93 (1995)
72	LUHDER (1998) J Exp. Med. 187:427-432

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OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

73	MATSUI (1999) J. Immunol. 162:4328-4335	
74	MCCOY et al. "Protective immunity to nematode infection is induced by CTLA-4 blockade," J. Exp. Med 186:183-187 (1997)	
75	NEUBERGER "Generating high-avidity human Mabs in mice," Nature Biotechnology 14:826 (1996)	
76	THOMPSON (1997) Immunity 7:445-450	
77	THOMPSON et al., Proc. Natl. Acad. Sci 86:1333-1337 (1989)	
78	WALUNAS et al. "CTLA-4 ligation blocks CD28-dependant T cell activation," J. Exp. Med 183:2541-2550 (1996)	
79	WALUNAS, et al., "CTLA-4 can function as a negative regulator of T Cell activation," Immunity. 1:405-413 (1994)	
80	WU et al., J Exp. Med. 185:1327-1335 (1997)	
81	YANG et al. "Eradication of established tumors by a fully human monoclonal antibody to the epidermal growth factor receptor without concomitant chemotherapy," Cancer Research 59:1236-1243 (1999)	
82	YOKOCHI (1981) J. Immunol. 128:823	

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